Chevy Chase Village

Memo

To: Geoffrey Biddle, Village Manager

From: Michael Younes, Manager of Contracts and Capital Projects

CC: Board of Managers

Date: 10/7/2008

Re: Photometric Analysis and Engineering Services Recommendation

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I have reviewed the three (3) proposals received to provide photometric analysis and engineering services to the Village. I recommend contract award to Rummel, Klepper & Kahl, LLP (the Contractor).

The Contractor has demonstrated their vast knowledge, competence, and has been extremely receptive in all previous conversations and interviews.

The Contractor will provide photometric plans for the existing conditions in the Village and a proposed plan using High Pressure Sodium, Metal Halide and LED bulb types each. Field checks of illumination levels will be conducted at intersections as well as at multiple other locations throughout the Village rights-of-way to determine the general light loss factor from trees and other structures. This light loss factor will be incorporated into the proposed photometric plans.

Below please find my evaluation matrix.

	RKK	Schlenger/Pitz	SRBR
Responsive to RFP (yes/no/marginal - y/n/m)	Y	Y	M
Pricing	$60,709	$12,170	$81,345
Experience – Roadway Photometric Surveys (1 to 5, 5 being best)	5	2	2
Approach (logic and level of effort) (1 to 5, 5 being best)	4	3	1
Deliverables Maturity (1 to 5, 5 being best)	5	4	3
Omissions/Qualified Responses (1 to 5, 5 being fewest and best)	5	3	1
Reference Check (1 to 5, 5 being best)	5	5	5
Totals	24	17	12

Chevy Chase Village

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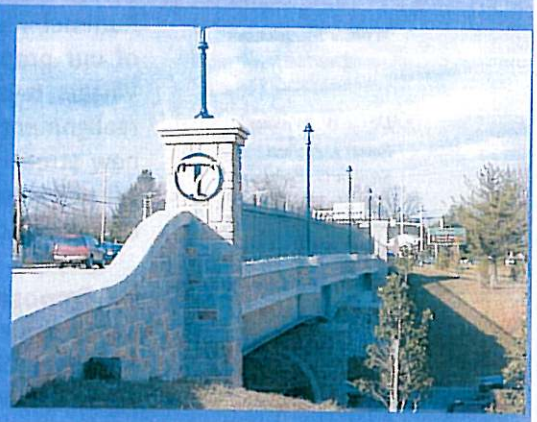
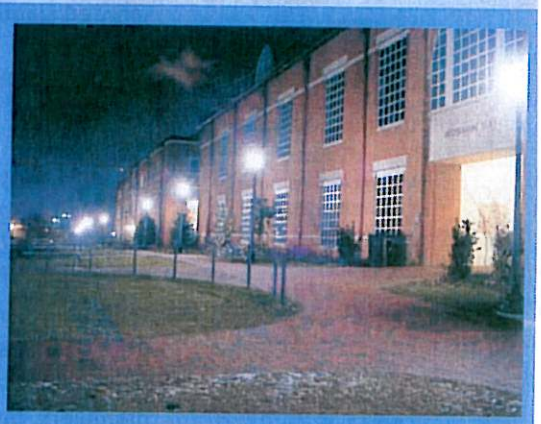
Photometric Analysis and Engineering Services





October 2, 2008

RK&K Baltimore, MD

Rummel,
Klepper
& Kahl, LLP

William K. Hellmann
Emeritus

David W. Wallace
Robert J. Halbert
Stephen G. Zentz
J. Michael Potter
Thomas E. Mohler
James A. Zito
Michael W. Myers

Charles M. Easter, Jr.
Joseph A. Romanowski, Jr.
Michael L. Krupsaw
Lars E. Hill
J. Tommy Peacock, Jr.
Martin C. Rodgers
Kenneth A. Goon
Richard J. Adams, Jr.
John A. d'Epagnier
Barbara J. Hoage
Christopher F. Wright
Owen L. Peery
Nancy R. Bergeron
Stuart A. Montgomery
David G. Vanscoy
Henry J. Bankard, Jr.
James F. Ridenour, Jr.
Robert J. Andryszak
Raymond M. Harbeson, Jr.
B. Keith Skinner
Karen B. Kahl
Seyed A. Saadat
John C. Moore
Eric M. Klein
Todd E. Rousenberger
Donald P. Lauzon
Thomas M. Heil
Robert D. Ostermiller
Barry L. Brandt
Malachi M. Mills
James A. Burnett
Brian L. Hepting

81 Mosher Street
Baltimore, MD 21217
Ph: 410-728-2900
Fax: 410-728-2992
www.rkk.com

October 2, 2008

Mr. Geoffrey Biddle, Manager
Chevy Chase Village
5906 Connecticut Avenue
Chevy Chase, MD 20815

Reference: **Photometric Analysis and Engineering Services**

Dear Mr. Biddle:

Rummel, Klepper & Kahl, LLP (RK&K) is please to submit three copies and one electronic version of our proposal to provide photometric analysis and engineering services within Chevy Chase Village. It is our understanding that the Village is presently considering replacement and/or realignment of its existing street lights and is seeking assistance in determining to what extent a new street light system should be implemented. RK&K is prepared to conduct an analysis of existing levels of illumination and uniformity within the Village's corporate limits and to develop a conceptual design for a new street light system.

1. Proposer's name and mailing address:
Rummel, Klepper & Kahl, LLP
81 Mosher Street
Baltimore, MD 21217

2. Proposer's current legal status:
Limited Liability Partnership

3. State Tax Identification Number:
52-0599112

4. General brief description of the proposer, including size, professional capabilities, key staff, organization structure and interest in project:
RK&K is a 622-person multidisciplinary consulting engineering firm headquartered in Baltimore, Maryland. The firm has been providing services throughout the Mid-Atlantic and Southeastern regions since 1923. RK&K services an array of federal, state, and local clients from our headquarters and 12 branch offices. We employ a well-diversified total staff including engineers, planners, environmental specialists, surveyors, designers, CADD technicians, construction managers, inspectors, and support staff. Our professional services include: lighting and electrical engineering; traffic engineering; transportation engineering; environmental engineering; structural engineering; transit/rail engineering; planning; construction management and inspection; natural gas, petroleum and pipeline engineering; land and site development; water resources engineering; natural resources; surveying; geotechnical engineering; geographic information systems (GIS); graphic design; hazardous waste; and energy management.

Ranked #128 on the 2008 *Engineering News Record's* listing of the "Top 500 Design Firms," RK&K is one of the most respected engineering firms in the Mid-Atlantic region. The firm has received numerous awards and recognition from clients and professional organizations for work performed on many diverse projects. RK&K is a partnership that promotes teamwork. We stress

Rummel, Klepper & Kahl, LLP

quality and service, are product-driven and responsive to our clients' needs. We are technically strong, diverse and aggressive, yet respectful.

The RK&K Team's key staff selected for this project includes three individuals with backgrounds in lighting design. This key staff has been responsible for similar projects and is completely familiar with the necessary processes and procedures for analyses and design related to lighting design. **Barry L. Brandt, PE, PTOE; Douglas A. Eby;** and **Heather E. Henck, PE, PTOE,** will serve as our key staff with expertise in lighting design services.

RK&K has considerable interest in this project as we have the experience and expertise to design lighting to meet stakeholders' needs. Our experience allows us to define elements crucial to the success of this project such as: obtaining community agreement to pole and luminaire style; incorporating proposed lights into existing topography such as trees, sidewalks, overhead and underground utilities, and landscaping; maximizing photometric characteristics of selected luminaires; and early consideration of electric services locations. We are very interested in this project and welcome the opportunity to successfully complete a lighting project to enhance the safety and uphold the visual character of Chevy Chase Village.

5. Contact person's name, title, phone number, fax number and email address:

James A. Zito, PE
Partner,
Phone: (410) 728-2900
Fax: (410) 728-3160
jzito@rkk.com

We have organized this submission into seven sections in accordance with your Request for Proposals.

Section 1 – Related Experience
Section 2 – References
Section 3 – Key Personnel
Section 4 – Price Quote
Section 5 – Schedule of Performance
Section 6 – Affidavits of Non-Collusion and Non-Conviction
Section 7 – Contract

RK&K has extensive expertise in the fields of roadway and pedestrian lighting and associated electrical design. Using nationally recognized lighting practices and local lighting policies, roadway and pedestrian lighting design work focuses on integrating lighting elements into existing and proposed geometry, landscaping, and utilities. Lighting services include conducting daytime surveys of lighting facilities, nighttime surveys of existing light levels, providing luminaire type recommendations, and conducting photometric analyses using lighting software such as AGI32 or Visual. Electrical designs are based on local maintenance preferences and requirements of electrical codes and local utility companies. RK&K is familiar with plan preparation from concept through advertisement, including contract drawings, specifications, cost estimates and coordination with the client and public agencies. We appreciate your consideration of our qualifications and look forward to participating in the next stage of your selection process.

Very truly yours,
RUMMEL, KLEPPER & KAHL, LLP

James A. Zito, PE
Partner

Chevy Chase Village

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SECTION 1

Related Experience

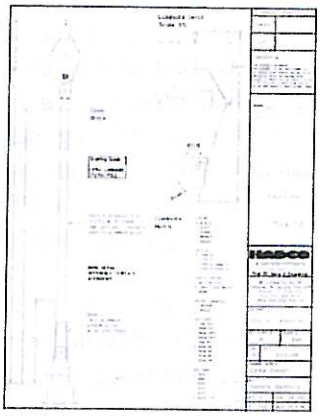
RK&K

Baltimore, MD

The following project descriptions provide a synopsis of RK&K's experience in conducting photogrammetric analysis for municipal corporations and other governmental entities.

Carroll Creek Creekscape Improvements, Frederick, MD: The Carroll Creek Creekscape Improvements is a multi-million dollar urban park project, which includes crosswalks and urban park improvements including: decorative lighting with three types of pedestrian luminaires and recessed stair and wall luminaires; three pedestrian bridges with specialty lighting, including LED luminaires, to illuminate the water below; brick and stone pedestrian walks; landscape planters; water features; an amphitheater; and a trellis with lighting and receptacles. RK&K provided design services including preparation of design documents (plans, specifications, and estimates) and bid phase services (including compiling the bid documents, attendance at a pre-bid meeting, responding to contract inquiries, addenda as required, and review of the final bids).

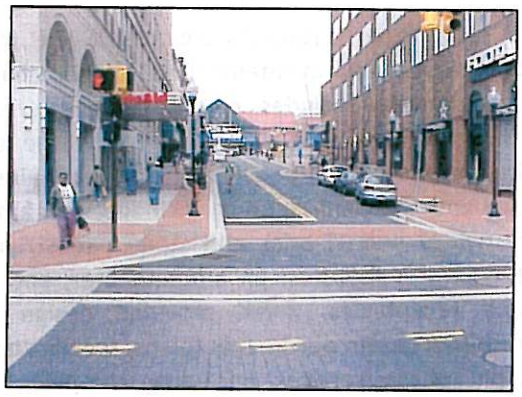
Taneytown Streetscape, Carroll County, MD: RK&K managed and coordinated the lighting design for a streetscape project to be completed by the Maryland State Highway Administration. The project includes the lighting and electrical design for MD 140 in Taneytown MD. RK&K attended several public meetings on the behalf of SHA and conducted a lighting presentation to inform the Town Managers of SHA's and IES lighting design criteria. RK&K managed our sub-consultant for the final lighting and electrical design plans. Coordination was required with Town officials and SHA to prepare project agreements, including MOU's. This project is currently under construction.



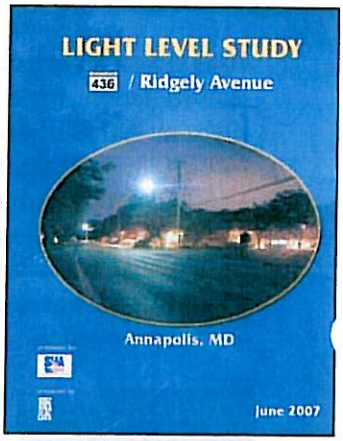
Jesup Blair Park Renovation, Montgomery County, MD: The Jesup Blair Park project is a complete renovation of an existing 14-acre historic, urban park in downtown Silver Spring, Maryland. RK&K provided design services including civil/site, stormwater management, tree preservation, lighting and utility design services. The park lighting system was redesigned to improve lighting levels along the pedestrian paths as well as to install lighting and time controls for basketball and tennis courts. Conduit installation was designed to avoid impacting critical tree roots. RK&K coordinated with public and private utility agencies to complete the work, including Potomac Electric Power Company for the relocation of leased lights.

Wilmington Riverfront Improvements, Wilmington, DE: RK&K was responsible for planning/preliminary engineering and final design of a new roadway and pedestrian connection between South Madison Street and Martin Luther King, Jr. Boulevard as part of the Wilmington Riverfront improvements. Extensive streetscape design included decorative pedestrian lighting, street trees, brick pavers, decorative signal poles, and sidewalks and bikeways. Throughout the City, pedestrian "Wilmington" fixture luminaires were coordinated with roadway cobra head luminaires to provide appropriate lighting levels for both motorists and pedestrians. The project was advertised in "Packages" to expedite the construction schedule. The project

involved close coordination with the Market Street Bridge, Christina Landing development, and existing business owners.



Lexington Street, Baltimore, MD: As the prime consultant to the City's Department of Public Works, RK&K provided design services for the conversion of Lexington Street from a pedestrian mall to an active cart-way with streetscape amenities. The goal of the project was to re-activate the street with vehicular traffic, parking areas, and loading zones while continuing to allow safe passage for pedestrians. Options for sidewalk widths, street furniture, and landscaping were evaluated to best complement the mix of retail and business opportunities along the street front. Specific design tasks were prepared by RK&K and included street lighting, utility modifications, and drainage. Presentation graphics were also prepared by RK&K for this high-profile project. The package included project descriptions, schedules, cost estimates, plans, and renderings.



Lighting Study MD 436, Annapolis, MD: Researched existing lighting conditions and set criteria for the MD 436 corridor. Daytime and nighttime visits were made to verify existing lighting conditions and take light level readings. An analysis was completed and results were compared to IES recommendations. Figures were developed to include existing light locations and study area maps. The final report included inventory of existing roadway and site characteristics identified from field work, an analysis of the traffic volumes and accident data, miscellaneous field observations, lighting improvement options and a recommended lighting improvement costs.

Rehabilitation of Frederick Douglass Bridge, District of Columbia: Provided lighting design, including photometric analysis, electrical circuit design and plan development, for South Capitol Street as part of the project to rehabilitate the Frederick Douglass Bridge over Anacostia River. Selected pedestrian and roadway lighting fixtures to compliment the aesthetics of the area and provide a gateway into the District. Also, coordinated extensively with the design engineers for the Nationals Ballpark and other adjacent streetscape projects to ensure cohesive lighting across the bridge and around the ballpark.

Charles Village Streetscape, Baltimore, MD: As a consultant to Struever Bros. Eccles & Rouse, Inc., RK&K provided civil/site and utility design services for the streetscape improvements. RK&K's services began at the conceptual phase of design and will proceed through the development of construction documents and construction administration. Through meetings with the four main constituents (Community, City, Johns Hopkins University, and our client), RK&K identified the major objectives of the project. Working with the landscape architect, RK&K prepared and presented several alternative plans to the stakeholders for review of light poles and luminaires, sidewalk paving materials, and street furniture. A concept was selected and modified in accordance with their recommendations and a final streetscape concept plan was presented to the City and Charles Village community groups for approval. The streetscape project required the addition of new pedestrian-scale lighting. RK&K also coordinated the proposed tree pit, crosswalk, and pedestrian lighting locations with the roadway layout and utilities.

MD 765 Streetscape, Calvert County, MD: Developed signing/pavement marking plans and lighting plans for the St. Leonard streetscape project. The project included 80 pedestrian lighting locations and roundabout lighting. The project was coordinated with the utility company for underground conduits and electrical design.

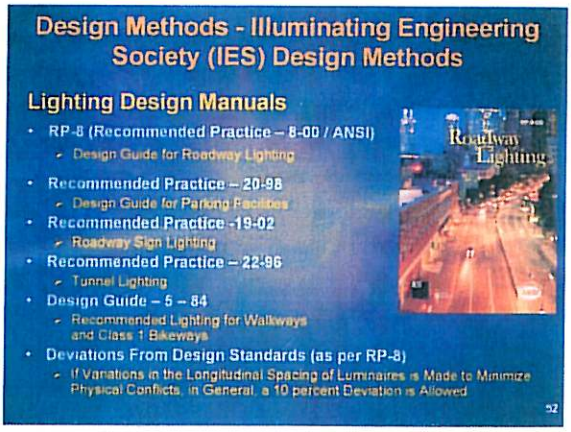
U.S. 29 Corridor GEC, Montgomery County, Maryland: Lead member on GEC Team coordinating the design of traffic control devices for 3 interchange projects along U.S. 29 in Montgomery County. Developed lighting design for

new bridges and conducted design assessment of contract documents. The projects included roadway, aesthetic and pedestrian lighting. Coordinated design efforts with Montgomery County, WMATA, M-NCPPC and other agencies. Attended construction partnering meetings as required to coordinate construction related issues.

Johns Hopkins University Open Space Implementation, Phase II, Baltimore, MD: RK&K was engaged by The Johns Hopkins University (JHU) to be the prime consultant on the second phase of the implementation of JHU's open-space master plan. This site improvement project encompassed approximately 4 acres of the JHU Homestead Campus. RK&K's specific tasks include site engineering, lighting, drainage, utility modifications, tree preservation, and construction administration. All areas received new pathway lighting, benches, bicycle racks, trash receptacles, pedestrian bollards, landscaping, and an irrigation system.

MD 122 Roadway Lighting, Baltimore County, MD: RK&K performed field investigations to locate existing lighting, conducted night-time light level readings and identified potential electrical service and lighting locations. Carried out photometric analysis using Visual and prepared a preliminary lighting layout. Conducted voltage drop calculations and designed an electrical design for the entire length of the project. Developed final construction plans and prepared a comprehensive engineer's estimate for a portion of MD 122.

Training Seminar – Roadway Lighting Design: Developed and presented a training seminar for roadway lighting design. Topics included lighting fundamentals, lighting design methods, lighting design software and construction document preparation. Graphics, custom animations and sound effects were used to enhance the exhibits used in the PowerPoint presentation. RK&K conducted coordination efforts with electrical contractors and lighting manufacturers to obtain a luminaire, lighting control cabinet and other hand-on materials to help augment the presentation.



Streetscape Presentation – Pedestrian Lighting: In conjunction with MDSHA a presentation was developed for pedestrian lighting. The presentation includes information local municipalities need to know pertaining to streetscape projects and pedestrian lighting. The presentation outlines the SHA policy with respect to IES criteria and options available for types of luminaries and lamps. The presentation has been used with much success for multiple Town meetings.

I-695 @ Charles St. Interchange, Baltimore County, MD Developed highway lighting, signing/pavement marking and traffic signal plans for the reconstruction of the I-695 (Baltimore Beltway) @ Charles Street interchange. The project included continuous roadway lighting and underpass lighting. Construction of the lighting was coordinated with maintenance of traffic so lighting can be maintained throughout construction. Temporary lighting was included as necessary. Traffic signal and signing plans were developed for new ramp configurations and temporary signal plans were developed for maintenance of traffic. A remote traffic microwave sensor was included in the project.

MARC Parking Area Expansion, Point of Rocks, Maryland: Designed parking lot lighting and electrical system, including special night lighting circuits, light pole receptacles, and security cameras; Coordinated with Allegheny Power to obtain power service requirements and coordinate the relocation of the existing power service; Coordinated with MTA to provide a sufficient electrical system for existing and future needs, including ticketing machines, call boxes and platform lights.

Chevy Chase Village

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SECTION 2

References

RK&K

Baltimore, MD

The following table contains client references where services similar to this contract have been provided. RK&K grants Chevy Chase Village consent to contact any of the following references for purposes of evaluating us for this contact. Expanded project descriptions are included in Section 1 – Related Experience of this proposal.

Contact Information	Project Title	Relevant Qualifications / Scope of Services
Mr. Chip Rupp Maryland State Highway Administration (410) 787-4080 CRupp@sha.state.md.us	Taneytown Streetscape, MD St. Leonard Streetscape, MD Leonardtown Streetscape, MD Lighting, Electrical and Streetscape Presentations Oxford Streetscape, MD MD 122 Lighting, MD MD 235 Pedestrian Lighting, MD Annapolis Lighting Study, MD	Senior Engineer, Lighting Design MDSHA, Traffic Engineering and Design Division
Mr. Raymond Petrucci, PE Delaware Department of Transportation (302) 760-2281 Raymond.Petrucci@state.de.us	Wilmington Riverfront Improvements, Wilmington, DE	Project Manager, Riverfront Improvements
Ms. Nancy McCormick Taneytown, MD (410) 751-1100 nbmccormick@taneytown.org	Taneytown Streetscape, MD	Director of Economic Development Streetscape Manager
Mr. Dennis German Maryland State Highway Administration (410) 545-8900 DGerman@sha.state.md.us	Manager of the MDSHA Streetscape Program	MDSHA Division Chief, Community Design Division

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SECTION 3

Key Personnel

RK&K

Baltimore, MD

Barry L. Brandt, PE, PTOE

Associate,

17Years with RK&K 1 Years with other firms
Education: BS, Civil Engineering, 1990
MS, Civil Engineering, 1991
Registration: Professional Engineer 1995, Maryland, # 21454
Professional Traffic Operations Engineer 1995, # 115

Relevant Experience

Mr. Brandt's engineering experience includes design of roadway lighting (including streetscapes, local roads, and major interchanges) and traffic control devices (signals, signing, pavement marking, and ITS devices). Mr. Brandt is in charge of RK&K's traffic control device design team, consisting of 15 engineers and designers. In recognition of his service, he was awarded the "Outstanding Public Service Award" from Maryland State Highway Administration in recognition of his performance of traffic control device design and development of the electrical and lighting design training programs. Mr. Brandt is experienced in insuring lighting designs meet Illuminating Engineering Society (IES) criteria while meeting constraints posed by roadway design features, community requirements, electrical code requirements, and budget limitations.

I-276/I-95 Interchange Project ITS Contract, Bucks County, PA: Project manager for contract to perform lighting, ITS, and signing design components of the Pennsylvania Turnpike Commission's I-276/I-95 interchange project. Developing lighting, ITS and signing plans for new I-276/I-95 interchange, new mainline toll plaza, modification to the existing mainline toll plaza, Interchange 351 and 358 modifications, and mainline widening for I-95 and I-276. Coordinated development of conceptual lighting plans for the project area including a high mast versus low-level lighting evaluation study, photometric analysis based on IES and PennDOT guidelines, and identification of power sources. Coordinated and met with PennDOT Central Office to achieve approval of conceptual lighting plans. Will direct the development of lighting plans, specifications and estimate for the entire project area. The project will likely yield lighting "Also Plans" for the numerous construction contracts developed by the six roadway/Toll plaza design contracts.

Electrical and Lighting Design Training, Maryland SHA: Project manager for the development of training programs to instruct MD SHA Office of Traffic and Safety design engineers in electrical and lighting design principles. Assisted in formulation of course content, development of the audio-visual presentations, production of course booklets, and served as an instructor. The electrical sessions focused on the electrical principles required for traffic control device design. The lighting session detailed the complete design process to follow for development of lighting design contract documents. The training included one-day sessions each for electrical and lighting design. The audio-visual presentations have been loaded onto SHA's Intranet and are available for self-study courses to all employees.

7th Street Lighting Project, Allentown, PA: Oversaw the lighting design of a project to replace the old, malfunctioning lighting system along 7th Street. Efforts included conducting public workshops to gain community input on light selection, measurement of existing light readings, development of photometric plans for City and PennDOT approval, power company coordination, development of lighting and electrical contract documents, and review of shop drawings. The project was completed in an accelerated timeframe in order to obtain a $1.4 Million grant from the Home Town Streets Program to fund the project.

US 1/Perry Street/16th Street, Prince George's County, Maryland: Project engineer for the development of all traffic control device designs for the improvement of US1 in Mount Rainier, including lighting, traffic signals, and signing/pavement markings. Lighting design included installation of approximately 50 decorative pedestrian lights, lighting for architectural features in the middle of a roundabout, and lighting for a small bus terminal. Lights were located based on many constraints in this urban environment, including business locations, sidewalk width, underground utilities, crosswalk locations, and on-street parking. The project included coordination with City officials and a local citizens group to obtain approval on the lighting fixture.

Bloomsbury Square, Annapolis, Maryland: Directed lighting design for street lighting in a new residential development, including roadway lighting, path lighting, and modification to lighting along an adjacent state-owned roadway. Assisted with the development of lighting maintenance agreements between City of Annapolis and BGE. Attended various meetings to coordinate with the City of Annapolis to achieve a lighting design to meet their design criteria and requirements.

Douglas A. Eby

Project Team Leader,

9 Years with RK&K 5 Years with other firms
Education: B.S., Urban Planning, 1993

Relevant Experience

Mr. Eby is a project team leader in RK&K's Traffic Engineering Design group, responsible for managing the development of highway lighting, signing/pavement marking, traffic signal and ITS plans for traffic engineering design projects. Over the past two years, Mr. Eby has functioned as a primary contact person for a traffic control device design open-end contract with the Maryland State Highway Administration. Mr. Eby has designed multiple highway and pedestrian lighting plans and over 50 traffic signals, as part of this contract in the past two years. Mr. Eby has also developed Traffic Control Device Design and Traffic Control Device construction training seminars. The seminars were all-day presentations which included PowerPoint presentations, color handouts and hands on equipment used to emphasize subject matter. The presentations were developed to train SHA and consultant staff. Mr. Eby is experienced with the procedures for developing design plans with Microstation and/or AutoCAD. Mr. Eby is honored to have received the Outstanding Service Award in 2005 from the MDSHA Office of Traffic and Safety.

Taneytown Streetscape, Carroll County, MD: RK&K managed and coordinated the lighting design for a streetscape project to be completed by Maryland State Highway Administration. The project includes the lighting and electrical design for MD 140 in Taneytown MD. RK&K attended several public meetings on the behalf of SHA and conducted a lighting presentation to inform the Town Managers of SHA's and IES lighting design criteria. RK&K managed our sub-consultant for the final lighting and electrical design plans. Coordination was required with Town officials and SHA to prepare project agreements, including MOU's.

MD 765 Streetscape, Calvert County, MD: Developed pedestrian lighting and roundabout lighting plans for the St. Leonard streetscape project. The project included 80 pedestrian lighting locations. The project was coordinated with the utility company for underground conduits and electrical design.

I-695 @ Charles St Interchange, Baltimore County, MD: Developed highway lighting, signing/pavement marking and traffic signal plans for the reconstruction of the I-695 (Baltimore Beltway) @ Charles Street interchange. The project included continuous roadway lighting, decorative bridge and underpass lighting. Lighting was modeled using Visual. Calculation grids were placed at elevations to account for changes in grade. Bridges were modeled in 3-D to verify the need for underpass lighting. Temporary lighting plan were developed and included as necessary.

Lighting Study MD 436, Annapolis, MD: Researched lighting and set criteria for MD 436. Daytime and nighttime visits were made to verify existing lighting conditions and take light level readings. An analysis was completed and results were compared to IES recommendations. Figures were developed to include existing light locations and study area maps. The final report included inventory of existing roadway and site characteristics found from field work, an analysis of the traffic volumes and accident data miscellaneous field observations, lighting improvement options and a recommended lighting improvement costs.

Streetscape Presentation – Pedestrian Lighting, MD: In conjunction with MDSHA a presentation was developed for pedestrian lighting. The presentation includes information local municipalities need to know pertaining to streetscape projects and pedestrian lighting. The presentation outlines the SHA policy with respect to IES criteria and options available for types of luminaries and lamps. The presentation has been used with much success for multiple Town meetings.

Training Seminars – Roadway Lighting Design and Electrical Fundamentals: Developed and presented training seminars for roadway lighting design and for electrical fundamentals. Lighting topics included lighting fundamentals, lighting design methods, lighting design software. Electrical topics included basic electrical concepts, definitions, formulas and relationships. Course also included the components of TCD electrical system and the circuit design process. Graphics, custom animations and sound effects were used to enhance the exhibits used in the PowerPoint. RK&K conducted coordination efforts with electrical contractors and lighting manufacturers to procure a luminaire, lighting control cabinet and other hand-on materials to help augment the presentations.

U.S. 29 Corridor GEC, Montgomery County, Maryland: Lead member on GEC Team coordinating the design of traffic control devices for 3 interchange projects along U.S. 29 in Montgomery County. Developed lighting design for the new bridges and conducted design assessment of contract documents. The projects included roadway, aesthetic and pedestrian lighting. Coordinated design efforts with Montgomery County, WMATA, M-NCPPC and other agencies. Attended construction partnering meetings as required to coordinate construction related issues.

HEATHER E. HENCK, PE, PTOE

Project Engineer, Rummel, Klepper & Kahl, LLP

6 Years with RK&K 0 Years with other firms
Education: BS, Civil Engineering, 2001
MS, Civil Engineering, 2002
Registration: Professional Engineer 2006, Maryland, # 32581
Professional Traffic Operations Engineer 2007, # 2077

Relevant Experience

Ms. Henck is experienced in the fields of roadway and pedestrian lighting and associated electrical design. Using nationally recognized lighting practices and local lighting policies, her roadway and pedestrian lighting design work focuses on integrating lighting elements into existing and proposed geometry, landscaping, and utilities. Lighting services include conducting daytime surveys of lighting facilities, nighttime surveys of existing light levels, providing light fixture recommendations, and conducting photometric analyses using lighting software such as AGI32. Electrical designs are based on local maintenance preferences and requirements of electrical codes and local utility companies. Ms. Henck is familiar with plan preparation from concept through advertisement, including contract drawings, specifications, cost estimates and coordination with the client and public agencies. Relevant experience includes:

Wilmington Riverfront Redevelopment, Wilmington, DE: Performed roadway and pedestrian lighting design in coordination with street rehabilitation and site development projects, including "A" Street, MLK Jr. Blvd, South Bank Walkway, Justison Landing, Madison Street Relocated, Harlan Park, and Kahuna Floating Dock. Performed field investigations to identify existing lights and electrical power sources; Developed lighting concepts and prepared lighting photometrics using AGI32; Summarized lighting requirements and results of photometric output in reports to DelDOT and the City of Wilmington; Integrated light locations with existing and proposed utilities and landscaping; Coordinated power requirements and service drop locations with Delmarva Power; Prepared lighting plans, specifications and construction estimates for each project, some including several phases of development.

Urban Wildlife Refuge, Wilmington, DE: Designed roadway, parking lot and pedestrian lighting in conjunction with the design of an Urban Wildlife Refuge facility; Selected cut-off lighting fixtures, solar pedestrian lights fixtures, and lighted bollards to meet environmentally sensitive design practices, reduce energy costs and minimize sky glow; Developed photometric plan for submission to New Castle County and prepared site lighting and electrical plans, specifications and construction cost estimate.

Rehabilitation of Frederick Douglass Bridge, DC: Provided lighting design, including photometric analysis, electrical circuit design and plan development, for South Capitol Street as part of the project to rehabilitate Frederick Douglass Bridge over Anacostia River; Selected pedestrian and roadway lighting fixtures to compliment the aesthetics of the area and provide a gateway into the District; Coordinated extensively with the design engineers for the Nationals Ballpark and other adjacent streetscape project to ensure cohesive lighting across the bridge and around the ballpark.

Carroll Creek Creekscape, City of Frederick, MD: Assisted with the lighting design for a 1.3 mile "creekscape" along Carroll Creek in Frederick, MD; Reviewed lighting photometrics, including pedestrian lighting, specialty bridge lighting, and trellis light, to ensure light levels met recommended criteria while achieving the landscape architect's vision for the creek; Checked electrical calculations and review lighting and electrical plans for accuracy.

Indian River Inlet Bridge, Delaware Seashore Park, DE: Designed electrical systems for the bridge and park lighting, including approximately 400 interior bridge lights and 55 receptacles, 60 specialty bridge uplights, aviation lighting, boat navigational lighting, 155 LED walkway lights, 70 recessed park walkway lights, 15 bollard lights at RV Park entrances and roadway lighting at the United States Coast Guard Entrance; Coordinated extensively with bridge designers to integrate lighting and electrical system elements into bridge elements with significant space constraints and aesthetic concerns; Coordinated park lighting with DNREC and the landscape architect; Arranged for multiple new service drops with Conectiv and temporary service drops to maintain existing bridge lighting.

Delaware Turnpike Lighting, DE: Developed lighting concepts using AGI32 and preliminary plans for improvements to the Delaware Toll Plaza, SR 1 interchange, and widening of I-95 to 5 lanes; Performed field investigations and utilized existing plans to identify existing lighting facilities and properties, including lights, power sources, lighting cabinets, junction wells, voltage, and number and size of cables; Worked extensively with Christiana Mall personnel to identify lighting electrical equipment inside and outside the mall. Coordinated with Delmarva Power to identify power source locations for freeway lighting. For the 5th Lane Widening project, prepared final plans, specifications and estimate, responded to contractor questions and reviewed shop drawings.

Chevy Chase Village

Incorporated 1920 / Montgomery County / Chairman, 6 Boardmembers

SECTION 4

Price Quote

RK&K

Baltimore, MD

Chevy Chase Village Photometric Analysis and Engineering Services

Task	Estimated Man-hours					
	Associate	Project Manager	Project Engineer	Lighting Designer	CADD / Technician	Total
A.1 - Existing photometric analysis (Deliverable F.1)		10		50		60
A.2 - Field Verification of Existing Lighting		4	8	20	20	52
A.3 - Nighttime light level survey		4	20	20		44
B. - Proposed Condition Analysis						
Photometric Analysis - High pressure Sodium (Deliverable F.2)	2	10	12	32	20	76
Photometric Analysis - Metal Halide (Deliverable F.2)	2	10	12	32	20	76
Photometric Analysis - Light Emitting Diodes (Deliverable F.2)	2	10	12	32	20	76
Field Refinement of Proposed Pole Locations	2	4	40	40		86
Develop Proposed Street Lighting Location Plans - *Selected Option Only* (Deliverable F.3)	2	4	10	20	80	116
C. - Cost-Benefit Analysis (Deliverable F.4)	2	10	40	10		62
Meetings and Coordination	16	16				32
Total	28	82	154	256	160	680

Chevy Chase Village
Photometric Analysis and Engineering Services

ADMINISTRATION:	Chevy Chase Village	**CONSULTANT:**	RK&K, LLP
PROJECT:	Photometric Analysis and Engineering Services	**SUBCONSULTANT:**	
		DATE:	2-Oct-08

AVERAGE HOURLY RATE:

Classification:	Avg. Hourly Salary:		Hours:			Extension:
Associate	$ 68.00	X	28	=	$	1,904.00
Project Manager	$ 52.00	X	82	=	$	4,264.00
Project Engineer	$ 33.00	X	154	=	$	5,082.00
Lighting Designer	$ 28.00	X	256	=	$	7,168.00
CADD / Technician	$ 26.00	X	160	=	$	4,160.00
		TOTAL:	680		$	22,578.00
	Average Rate equals Extension divided by Hours:				$	33.20

COST AND PRICE SUMMARY

1. DIRECT LABOR:	680 Manhours	X $	33.20	Average Hourly Rate = (See above)	$	22,578.00
2. ESCALATION:	2.00% of Item 1				$	451.56
3. PAYROLL ADDITIVES:	PB & OH 135.96% of Items 1 and 2				$	31,310.99
4.				*Sub-total Items 1-3:*	$	54,340.55
5. FIXED FEE:	a. Dollar amnt. for profits and other factors:				$	5,434.05
	b. Line 5a represents		10.0%	of Line 4		

6. DIRECT EXPENSES: Append justification as necessary.

a. Mileage	400 miles at	$	0.585	per mile =	$	234.00
b. Printing	400 prints		$0.10	per page	$	40.00
c. Designating / Locating				=	$	-
d.				=	$	-
			Total Direct Costs:		$	274.00

7. SUBCONTRACTOR/S:

a.		
b.		
	Total Subcontractors:	$ -

8. OTHER (Specify)

a. Principals Direct	8 hours at	$	75.00	per hour =	$	600.00
b. Principals Profit	10%			=	$	60.00
c.					$	-
			Total Other:		$	660.00

9. TOTAL PROPOSED FEE FOR THIS TASK:	**$**	**60,709**

10. Will your firm accept this portion on a lump sum basis?

	No
If yes, what amount?	X Yes

Chevy Chase Village

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SECTION 5

Schedule for Performance

RK&K Baltimore, MD

Chevy Chase Village
Photometric Analysis and Engineering Services

Schedule

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16
1. Field Verification of Existing Lighting																
2. Nighttime Light Level Survey																
3. Existing Photometric Analysis (Deliverable F.1)																
4. Proposed Condition Analysis																
4a. High Pressure Sodium Alternative (Deliverable F.2)																
4b. Metal Halide Alternative (Deliverable F.2)																
4c. Light Emitting Diode Alternative (Deliverable F.2)																
5. Cost-Benefit Analysis (Deliverable F.4)																
6. Field Refinement of Proposed Pole Locations																
7. Develop Proposed Street Lighting Location Plans (Deliverable F.3)																
8. Final Field Review																
9. Finalize Street Lighting Location Plans																

October 2, 2008